REMARKS

This is a full and timely response to the outstanding final Office Action mailed November 2, 2005 (Paper No. 20051027). Upon entry of this response, claims 1-8, 10-18, and 20-46 are pending in the application. In this response, claims 1, 11, 20, and 29 have been amended, and claims 9 and 19 have been cancelled.

1. Rejection of Claims 1-7, 9-17, and 19 under 35 U.S.C. §103

Claims 1-7, 9-17, and 19 have been rejected under §103(a) as allegedly obvious over *Shah-Nazaroff* (6,157,377) in view of *Gell* (5,802,502) and *Blahut* (5,532,735). Applicant respectfully submit that the rejection has been overcome. It is well established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of references, the cited combination of references must disclose, teach, or suggest, either implicitly, all elements/features/steps of the claim at issue. *See, e.g., In re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988); *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981).

A. Claims 1 and 11

i. The proposed combination does not disclose, teach, or suggest "receiving bandwidth allocation schedule information describing a division of bandwidth, during a plurality of schedule periods"

Claims 1 and 11 have been amended, and now disclose the feature of "information describing a division of bandwidth, during a plurality of scheduled periods." Neither *Shah-Nazaroff*, *Gell*, nor *Blahut* discloses this information, nor do any of these references disclose receiving such information.

ii. The proposed combination does not disclose, teach, or suggest "dynamically assigning a price criterion to each of a group of viewing options for a video program, each viewing option associated with a content delivery mode, the assignment based at least in part on the bandwidth allocation information"

Shah-Nazaroff discloses a system in which price is based on the features selected by a user: "a viewer at client system 110 who has ordered a pay-per-view movie can pay an additional fee to receive the movie at a higher video resolution and/or in digital Dolby surround sound rather than monotone audio" (Col. 2, lines 20-25); "for each incremental level of resolution, more bandwidth is needed for the broadcast, so the price of each incremental level of resolution may be higher" (Col. 2, lines 49-52); "a viewer may buy an upgraded media feature to receive a recordable version of the broadcast" (Col. 2, lines 65-67).

Gell describes price determination as follows: "At present, different telecommunications suppliers provide services at different prices, which may be calculated on different bases. Many service suppliers charge on the basis of time used, but different rates may be used in different time bands, and over different distance bands (e.g. local, long distance or international). The time and distance bands employed by different suppliers may differ, and additionally, different suppliers may offer features such as discounts for bulk usage, subscriptions, or lower prices at times of low network usage." (Col. 1, lines 24-33.)

Blahut discloses an interactive TV system that "allows for adjusting an amount of a bill of a subscriber to interactive television services based upon the amount of advertisements viewed in a show" and "adjusting an amount of a bill of a subscriber to interactive television services based upon the level of advertisements sent to the interactive services subscriber location on a regular basis." (Col. 2, lines 20-30.)

Amended claims 1 and 11 include the feature of assigning a price criteria "based at least in part on the bandwidth allocation schedule information." The phrase "bandwidth allocation

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schedule information" is further described in amended claims 1 and 11 as "describing a division of bandwidth, during a pluralty of schedule periods, between at least a first service and a second service provided by the digital broadband delivery system to a plurality of digital home communication terminals." These references, taken individually or in combination, do not disclose, teach, or suggest this feature. Even assuming, arguendo, these references teach that the price for one service among many depends on bandwidth used by the service, there is no teaching that information about the division of bandwidth between services is provided by the terminals, or that this information used to assign prices.

iii. Conclusion

Since the proposed combination does not teach at least the above-described features recited in claims 1 and 11, a prima facie case establishing an obviousness rejection has not been made. Thus, claims 1 and 11 are not obvious under the proposed combination of Shah-Nazaroff in view of Gell and Blahut, and the rejection should be withdrawn.

B. Claims 2-7, 9-10, 12-17, and 19

Since claims 2-7, and 10-17 are allowable, Applicant respectfully submits that claims 2-7, and 10-17 are allowable for at least the reason that each depends from an allowable claim. In re Fine, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicant respectfully requests that the rejection of claims 2-7, and 10-17 be withdrawn.

Claims 9 and 19 are cancelled without prejudice, waiver, or disclaimer, and the rejection of these claims is therefore rendered moot. Applicant takes this action merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicant reserves the right to pursue the subject matter of these cancelled claims in a continuing application, if Applicant so chooses, and does not intend to dedicate any

of the cancelled subject matter to the public. Applicant expressly reserves the right to present cancelled claims 9 and 19, or variants thereof, in continuing applications to be filed subsequent to the present application.

2. Rejection of Claims 20-26 and 28-44 under 35 U.S.C. §103

Claims 20-26 and 28-44 have been rejected under §103(a) as allegedly obvious over *Shah-Nazaroff* (6,157,377) in view of *Gell* (5,802,502) and *Blahut* (5,532,735) and *Son* (6,697,376). Applicant respectfully traverses this rejection. It is well established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of references, the cited combination of references must disclose, teach, or suggest, either implicitly, all elements/features/steps of the claim at issue. *See, e.g., In re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988); *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981).

A. Claims 20 and 29

i. The proposed combination does not disclose, teach, or suggest "a bandwidth allocation manager" or "a bandwidth allocation scheduler"

The Office Action (pages 7-8) alleges that the "bandwidth allocation manager" recited in claim 20 and the "bandwidth allocation scheduler" recited in claim 29 each correspond to the server system with broadcast source IO module 30, billing I/O client 840 and client I/O 820, disclosed in Col. 10, lines 1-36 of *Shah-Nazaroff*. The Office Action (pages 7-8) further alleges that the claimed feature "dynamically assigning one of a plurality of content delivery modes to each of a plurality of digital transmission channels" corresponds to the teaching in *Shah-Nazaroff* where a "user orders a VOD program from a satellite provider, and is assigned to a channel with fewer simultaneous transmissions in order to receive a higher quality picture/resolution."

Next, the Office Action (p. 3) alleges that the claimed feature "dynamically assigning one of a plurality of content delivery modes to each of a plurality of digital transmission channels for each of a plurality of time periods" corresponds to the teaching in *Blahut* that "two different VOD services are provided to users 222 from a headend 202 over a common medium over a number of virtual channels for a number of period…further a schedule is provided."

Even assuming that these characterizations of the references are true, combining one teaching that a head-end has a program schedule with another teaching that a head-end transmits on different channels to different users on the same medium does not result in the feature "a bandwidth allocation manager that produces a bandwidth allocation schedule" as recited in amended claim 20 or a "a bandwidth allocation scheduler that dynamically assigns one of a plurality of content delivery modes to each of a group of digital transmission channels for each of a plurality of time periods" as recited in claim 29. Nor do the teachings of *Gell* and *Son* remedy this deficiency.

ii. The proposed combination does not disclose, teach, or suggest "a pricing system that...dynamically assigns a price criterion to each of a group of viewing options based at least in part on the bandwidth allocation information received from the bandwidth allocation manager"

Shah-Nazaroff discloses a system in which price is based on the features selected by a user: "a viewer at client system 110 who has ordered a pay-per-view movie can pay an additional fee to receive the movie at a higher video resolution and/or in digital Dolby surround sound rather than monotone audio" (Col. 2, lines 20-25); "for each incremental level of resolution, more bandwidth is needed for the broadcast, so the price of each incremental level of resolution may be higher" (Col. 2, lines 49-52); "a viewer may buy an upgraded media feature to receive a recordable version of the broadcast" (Col. 2, lines 65-67).

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Gell describes price determination as follows: "At present, different telecommunications suppliers provide services at different prices, which may be calculated on different bases. Many service suppliers charge on the basis of time used, but different rates may be used in different time bands, and over different distance bands (e.g. local, long distance or international). The time and distance bands employed by different suppliers may differ, and additionally, different suppliers may offer features such as discounts for bulk usage, subscriptions, or lower prices at times of low network usage." (Col. 1, lines 24-33.)

Blahut discloses an interactive TV system that "allows for adjusting an amount of a bill of a subscriber to interactive television services based upon the amount of advertisements viewed in a show" and "adjusting an amount of a bill of a subscriber to interactive television services based upon the level of advertisements sent to the interactive services subscriber location on a regular basis." (Col. 2, lines 20-30.)

Claims 20 and 29 include the feature of assigning a price criteria "based at least in part on the bandwidth allocation information received from the bandwidth allocation manager." These references, taken individually or in combination, do not disclose, teach, or suggest this feature. Even assuming these references teach that the price for one service among many depends on bandwidth used by the service, there is no teaching that information about how bandwidth is allocated between services is provided by the terminals and used to assign prices.

iii. Conclusion

Since the proposed combination does not teach at least the above-described features recited in claims 20 and 29, a *prima facie* case establishing an obviousness rejection has not been made. Thus, claims 20 and 29 are not obvious under the proposed combination of *Shah-Nazaroff* in view of *Gell* and *Blahut*, and the rejection should be withdrawn.

B. Claims 21-26, 28, and 30-44

Since claims 20 and 26 are allowable, Applicant respectfully submits that claims 21-26, 28, and 30-44 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicant respectfully request that the rejection of claims 21-26, 28, and 30-44 be withdrawn.

3. Rejection of Claims 8 and 18 under 35 U.S.C. §103

Claims 8 and 18 have been rejected under §103(a) as allegedly obvious over *Shah-Nazaroff* (6,157,377) in view of *Gell* (5,802,502), *Blahut* (5,532,735), and *Candelore* (6,057,872). Applicant respectfully traverses this rejection. Since claims 1 and 11 are allowable, Applicant respectfully submits that claims 8 and 18 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicant respectfully request that the rejection of claims 8 and 18 be withdrawn.

4. Rejection of Claim 7 under 35 U.S.C. §103

Claim 7 has been rejected under §103(a) as allegedly obvious over *Shah-Nazaroff* (6,157,377) in view of *Gell* (5,802,502), *Blahut* (5,532,735), *Son* (6,697,376), and *Candelore* (6,057,872). Applicant respectfully traverses this rejection. Since claim 1 is allowable, Applicant respectfully submits that claim 7 is allowable for at least the reason that it depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicant respectfully request that the rejection of claim 7 be withdrawn.

5. Rejection of Claims 45-46 under 35 U.S.C. §103

Claims 45-46 have been rejected under §103(a) as allegedly obvious over *Shah-Nazaroff* (6,157,377) in view of *Gell* (5,802,502), *Blahut* (5,532,735), *Son* (6,697,376), and *Arsenault* (6,701,528). Applicant respectfully traverses this rejection. Since claim 29 is allowable, Applicant respectfully submits that claims 45-46 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicant respectfully request that the rejection of claims 45-46 be withdrawn.

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CONCLUSION

Applicant respectfully requests that all outstanding objections and rejections be

withdrawn and that this application and presently pending claims 1-8, 10-18, and 20-46 be

allowed to issue. Any statements in the Office Action that are not explicitly addressed herein are

not intended to be admitted. In addition, any and all findings of inherency are traversed as not

having been shown to be necessarily present. Furthermore, any and all findings of well-known

art and official notice, or statements interpreted similarly, should not be considered well known

since the Office Action does not include specific factual findings predicated on sound technical

and scientific reasoning to support such conclusions. If the Examiner has any questions or

comments regarding Applicant's response, the Examiner is encouraged to telephone Applicant's

undersigned counsel.

Respectfully submitted,

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